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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

In the matter of	)	
	)	
Access Charge Reform	)	CC Docket No. 96-262
	)	
Price Cap Performance Review	)	CC Docket No. 94-1
for Local Exchange Carriers	)	RM-9210

BELL ATLANTIC COMMENTS ON NOTICE TO REFRESH THE RECORD

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BELL ATLANTIC[1] COMMENTS ON NOTICE TO REFRESH THE RECORD

Little more than a year ago, the Commission concluded that a combination of price caps and competitive market forces was the appropriate way to regulate local exchange carrier interstate prices. In making that determination, the Commission specifically rejected additional prescriptive rate cuts as harmful to both consumers and competition. The Commission was right then, and subsequent events in the competitive marketplace have only corroborated that decision. In contrast, the Commission decided at the same time to dramatically increase the annual reductions in the price caps based on an assumption that local exchange carrier productivity growth was increasing. Current data demonstrates that this assumption was incorrect, that in fact productivity growth is falling and that future annual price reductions must be much smaller.

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[1] The Bell Atlantic telephone companies ("Bell Atlantic") are Bell Atlantic-Delaware, Inc.; Bell Atlantic-Maryland, Inc.; Bell Atlantic-New Jersey, Inc.; Bell Atlantic-Pennsylvania, Inc.; Bell Atlantic-Virginia, Inc.; Bell Atlantic-Washington, D.C., Inc.; Bell Atlantic-West Virginia, Inc.; New York Telephone Company; and New England Telephone and Telegraph Company.

In rejecting further prescriptive reductions, the Commission acknowledged the need to give market-based regulation time in order to allow competition to take hold and for the local carriers to begin to use the pricing flexibility tools that were intended to be an integral part of such regulation. Since the release of the *Access Reform Order*, all measures of competition have grown significantly, but the Commission has failed to take the promised action to provide local carriers the freedom to adjust their prices to meet that competition. To call the market-based approach a failure at this stage as the long distance incumbents urge would be like folding your hand before all the cards are dealt – it is simply too soon for the Commission to declare the defeat of its own policies.

Moreover, the Commission's own productivity model, run with updated data, reveals that productivity growth is on a downward trend and the Commission's current productivity projections vastly overstate actual productivity growth. And the very rate restructures and competitive forces that have slowed productivity growth likely will continue to cause productivity growth to trend even lower in the future. As a result, the forward-looking productivity offset -- the so-called "X factor" -- should be substantially reduced. Indeed, this new data makes clear that additional prescriptive rate cuts go in precisely the wrong direction and would be wholly arbitrary.

I. There Is No Basis To Abandon Market-Based Regulation

In the *Access Reform Order*, the Commission correctly observed that "a primarily market based approach ... will better serve the public interest" and will result in "a better combination of prices, choices and innovation than can be achieved through rate prescription." *Access Charge Reform*, 12 FCC Rcd 15982 at ¶¶ 263, 289 (1997*) aff'd sub nom. Southwestern Bell v. FCC*, 153 F.3d 523 (8th Cir. 1998). In fact, arbitrarily prescribing rates to some measure of forward looking costs is bad economics and bad policy. Moreover, given the demonstrable growth in competition, the long distance carriers' make-weight arguments that the Commission should abandon the current regulatory system are without foundation.

1. The Prescriptive Approach to Rate Setting is Bad Economic Policy.

Starting in 1990 with rates that were based on actual costs of the network, the Commission has used price cap regulation to ensure that rates will remain at reasonable levels. Through the operation of the productivity offset, the Commission has driven prices consistently lower and pushed local exchange carriers to make corresponding reductions in costs and improve efficiency. By setting the productivity offset based on historical productivity growth, the Commission has already imposed what it determined to be the maximum sustainable rate reductions. This regulatory scheme has served to produce year over year price reductions while also permitting competitors to enter and become established in the marketplace.

In contrast, adopting additional prescriptive rate cuts, as the long distance incumbents propose, would strongly undermine the benefits that the Commission's price cap rules have produced.

First, imposing prescriptive rate cuts would undermine incentives to improve efficiency by denying carriers the benefits of their efforts to become more efficient. As Dr. Robert Crandall explains in his accompanying declaration, imposing prescriptive price cuts "reflects a movement towards cost-based regulation and compromises the efficiency-enhancing properties of price caps." Declaration of Robert W. Crandall, ¶ 16 (attached as Exhibit 1).

Second, there is no economic justification for pushing rates to incremental cost as a proxy for pricing in a competitive market. As Dr. Alfred Kahn has recently explained, "in unregulated markets, prices tend to be set on the basis of the actual costs of incumbent firms, and they should be." A. Kahn, LETTING GO: DEREGULATING THE PROCESS OF DEREGULATION at 96 (1998).

Third, artificially reducing rates to incremental cost affirmatively deters competitive entry. As Dr. Kahn also explained, to force prices lower not only harms the incumbent, but "would actually discourage competitors coming in and building their own facilities, which it was the clear intention of the new Act to encourage." *Id.* This concern is shared by new entrants to these markets. In the access reform proceeding, competing local exchange and access providers (which were then independent of the large long distance carriers) argued against prescriptive rate cuts precisely because such artificial cuts would affirmatively deter competitive entry. *See* Comments of Time Warner at 19 (filed Jan. 29, 1997) ("the development of competition over the long term would be more beneficial than the short term benefits of prescription"); Comments of TCG at 8 (filed Jan 29, 1997) ("TCG has always favored the use of market-based approaches to improve the quality and lower the pricing of Incumbent Local Exchange Carrier services").

Finally, the Commission itself has recognized that if it were to impose additional prescriptive rate cuts, it would have no way of knowing what the appropriate rate levels should be. The Commission recognized that "as a practical matter, accurate forward-looking costs models are not available at the present time to determine the economic cost of providing access service" *Access Reform Order*, ¶ 45. Once the Commission departs from market-based pricing rules, it runs a significant risk that regulation will "create and maintain distortions in the investment decisions of competitors." *Id.*, ¶ 263. And imposing dramatic cuts in access charges would prove "highly disruptive to business operations" and lead to "significant errors" in the level of access charges that could "impede the development of competition" *Id.*, ¶ 46.

2. It is Premature to Revisit the Commission's Rejection of Prescriptive Rate Reductions.

Long distance carriers do not take issue with the Commission's recognition that "competitive markets are far better than regulatory agencies at allocating resources and services efficiently for the maximum benefit of consumers." *Access Reform Order*, ¶ 42. Instead, they argue that the Commission should revisit its decision based on changed circumstances. But the Commission anticipated such self-serving arguments and has already rejected them.

Indeed, as explained above, there is no basis whatsoever to revisit the decision to reject additional counter-productive prescriptive rate cuts. What's more, the Commission specifically has addressed the issue of the appropriate timing to reopen this question. The Commission adopted a "prescriptive backstop" at the time it adopted market-based regulation by requiring local carriers to submit cost studies for those services still under price cap regulation as of February 8, 2001. *Access Reform Order*, ¶ 267. The Commission identified six reasons to allow time before reconsidering its decision to reject additional prescriptive rate reductions. Each of these reasons provide an independent basis to reject arguments for reexamining the prescriptive approach today.

First and most important, the Commission recognized that in order to give its market-based approach a chance, "economic logic" requires that incumbent local exchange carriers must be given increased pricing flexibility to "permit them to respond to competitive entry." *Access Reform Order* at ¶ 270. The Commission promised to implement such changes in a subsequent order. Because the Commission has yet even to establish the appropriate triggers for more flexible pricing, the market-based approach has not yet been fully implemented, and it is premature to make any evaluation as to its effectiveness.

Second, the Commission selected a date more than three years after its order was adopted precisely "to give competition sufficient time to develop substantially in the various markets for interstate exchange access services." *Id.* at ¶ 268. In other words, the Commission recognized that even with the strong growth in competition that was expected, it would take more than the few months that have passed to develop fully competitive access markets, and that it would be "imprudent to prejudge" the effectiveness of the market opening measures that have been recently implemented by the local carriers under supervision of the Commission and the states. *Id.* at ¶ 269.

Third, the Commission recognized a need to allow time "to take into account the effects of implementing the substantial changes" that were adopted in the *Access Reform Order*. *Id.* at ¶ 268. In fact, those changes have not even been fully implemented, much less allowed time to impact competition.

Fourth, the Commission sought to allow time to take into account the changes in universal service structure. *Id.* The Commission has not even resolved what these changes will be, much less allowed time to see what impact they would have on markets.

Fifth, the Commission anticipated that by 2001 it would have "additional regulatory tools" that would permit it to "assess the reasonableness of access charges."

Id. The Commission recognized that at the time of the order there were no accurate forward-looking cost models "to determine the economic cost of providing access service." Id. at ¶ 45. No such model exists today. Indeed, the model platform the Commission plans to use for universal service purposes has not even been tested with actual data, much less been put to practical use. Moreover, while the Commission's platform may eventually have some use as part of a universal service model to compare *relative* costs for universal service purposes, it is far too imprecise to provide any guidance as an access model to calculate *absolute* cost levels for setting prices.

Finally, the Commission recognized that allowing time for competition to develop will also give the Commission time to observe the impacts of such competition on rates and services. The Commission explained that the "experience" gained from "observing the effects of emerging competition" would permit it to evaluate the need for and, if necessary, better implement potential future prescriptive measures. *Id.* at ¶ 269.

3. Competition is Growing.

Faced with an overwhelming case in favor of providing a period of years to allow the Commission's market-based approach to work, the long distance incumbents attempt to justify another prescriptive rate cut by complaining that competition has been stymied. This claim cannot serve as a basis for action here in the face of overwhelming evidence to the contrary. Indeed, even in the release of the notice here, Chairman Kennard recognized in understated terms that "competition for the provision of access services is growing."

Incumbent local exchange carriers face both direct competition for access services themselves, as well as added competition resulting from competitive local exchange carriers displacing the incumbent as the provider of local service. As Chairman Kennard has testified, we should expect local competition to grow with "the type of steadily increasing momentum that we saw with the introduction of competition into the long distance market." Statement of William E. Kennard, Chairman, FCC, before the Subcommittee on Commerce and the Judiciary Committee on Appropriations, U.S. House of Representatives, 1998 FCC LEXIS 1775 (Mar. 25, 1998) ("Kennard March Testimony"). As the Chairman understood, "that's exactly what we are seeing." *Id.* Moreover, as the Chairman testified, illustrative examples of competition are many and varied:

> We see growing competition in the hundreds of state-approved interconnection agreements between incumbents and competitive local exchange carriers ("CLECS") entering the local telephone market. The top 10 CLECS have switches in 132 cities spanning 33 states and the District of Columbia. Approximately 2400 interconnection agreements have been created under the 1996 Act's framework. And over the past two years, $14 billion has been invested in CLECS, and their combined market capitalization has risen to over $20 billion.

Kennard March Testimony. Indeed, in just the brief time since the *Access Reform Order* was decided, the number of major multistate competitive local exchange carriers has tripled. *Number of Large Multistate CLECs Triples Since 1997*, Communications Daily, Oct. 8, 1998.

This dramatic increase in competitive entry has begun to show equally dramatic results. First, in some areas of the business, competitors are now winning the *majority* of new business from the incumbents. As one financial analyst described, the first quarter of 1998 was "a watershed time in the local exchange industry" as competitive local exchange carriers had "more net business line additions than the Bells as a group."

Salomon Smith Barney, *CLECs Surpass Bells in Net Business Line Additions For First Time*, May 6, 1998.

Second, the FCC itself has refuted arguments that the Act is not working by pointing to a Merrill Lynch report that shows *competition is growing faster for local than it did for long distance*:

> Not true counters the FCC. Competition in the local calling market is moving *faster* than the 1980's battle over long distance. Two years after the Act, rivals have captured 3.5% of local phone revenues from the Baby Bells, says Merrill. In contrast, two years after the 1979 court decision letting MCI sell long distance services, carriers had won only 1.4% of that market from AT&T, the FCC notes.
>
> For next year, the third since deregulation, Merrill predicts that local competitors will control 6% of the market . . . .

Catherine Yang, Yes, *Virginia, There Is Phone Competition*, BUSINESS WEEK, Sept. 28, 1995, at 6 (emphasis added). As another analyst explained:

> [T]he combination of access to low cost capital coupled with a clear regulatory and public policy initiative toward opening up local markets has allowed the CLECs as a group to achieve in less than 2 years after the Telecom Act, what it took MCI and other alternative long distance carriers over 10 years to achieve during the 1970s and 1980s. If one takes the obvious logical extension of this, this means that the 50% loss of market share that AT&T saw from 1986 through 1996 could be replicated in the local market in a much quicker time period.

CLECs Surpass Bells Report.

In addition to this rapid growth in local exchange competition, the growth in direct competition to exchange access services themselves has been equally dramatic. Most significant has been the purchase of the largest competitive access providers by the largest long distance carriers. Quite simply, this allows them quickly and easily to supplant Bell Atlantic's access service with internally provided connections through their new affiliates. For example, one financial analyst estimates that as a result of the MFS and Brooks Fiber acquisitions, the new WorldCom can provide its latest addition, MCI, with more than 70% of its access capacity, and, "given the current expansion plans," that figure should grow to 90%. Jack B. Grubman and Sheri McMahon, Salomon Smith Barney, *WorldCom, Inc.*, Apr. 9, 1998. Similarly, regardless of the impact of AT&T's proposed merger with TCI, AT&T's purchase of TCG is expected to result in $1.1 to $1.5 billion in synergy savings in 1999, of which more than half are expected to be network access savings. Prudential Securities, *AT&T Company Update*, Jan. 21, 1998.

Bell Atlantic is clearly seeing the impact of this competitive firestorm. As of the end of August, the total estimated lines in Bell Atlantic's service area provided by competitors has increased from less than 500 thousand a year earlier to approximately 1.3 million. During the same period, the number of facilities-based competitive lines has increased to almost 800 thousand, and the number of resold lines has almost quadrupled (to half a million lines). In the year after the *Access Reform Order* was released (August to August comparison), the number of unbundled loops has doubled (more than 23 thousand in New York State alone). Bell Atlantic has established 653 collocation sites in its switching centers and the number of interconnection trunks to competitive local exchange carriers has more than doubled since the beginning of the year to 347 thousand as of August.

Bell Atlantic is also experiencing significant growth in direct competition for its access services. Ten percent of Bell Atlantic's own switched access traffic is carried over competitors' transport facilities. For its high capacity special access services, competitors already have almost half of the market in the major urban areas where demand is concentrated including the New York metro area, Philadelphia, Pittsburgh, Baltimore and the District of Columbia.

II. The Productivity Offset Should Be Reduced

In addition to its reliance on market forces to produce competitive rate levels over time, the Commission also left its price cap rules in place to ensure that rates remain at reasonable levels in the interim. These rules already cap rates and assure that real prices will decrease year after year. As the Commission has explained, price cap regulation is "designed to mirror the efficiency incentives found in competitive markets, thus acting as a transitional regulatory scheme until the advent of actual competition makes price cap regulation unnecessary." *Price Cap Performance Review*, 10 FCC Rcd 8961, ¶ 1 (1995). Under price cap regulation, local exchange carriers have reduced access rates by more than eleven billion dollars, including the $1.5 billion reduction ordered just last year.[2]

The most current data, makes clear, however, that the Commission's order *over*stated the level of productivity growth that would be experienced as competition intensifies. As a result, rather than increase the current productivity offset as the long distance incumbents urge, the only change to the current price cap formula that is supported by the record is a decrease in the annual productivity offset. Specifically, the most recent data demonstrates that there is no justification for retaining an offset greater than 4.4%, and there are powerful reasons to adopt a forward looking offset that is lower.

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[2] Despite one of the greatest economic expansions in our nation's history, the staggering growth in competition combined with the massive rate cuts ordered in the Commission's 1995 and 1997 price cap decisions has meant that Bell Atlantic's growth rate for interstate access revenues has steadily *fallen* in the last few years and is approaching zero. *See* Bell Atlantic ARMIS Report 492A.

When the Commission increased the X factor to 6.5%, it justified the increase based on the results of its total factor productivity model and the assumption of an upward trend in productivity growth. *Price Cap Performance Review*, Fourth Report and Order, 12 FCC Rcd 16642, ¶141 ("1997 Price Cap Order"). Based on more current data, it is clear that the 6.5% X factor is overstated and that the current trend in productivity growth is actually downward. Attached to its comments to the Notice, USTA provides an updated run of the Commission's own total factor productivity model. Leaving the model exactly as the Commission staff designed it, and changing only the inputs to reflect updated data, the FCC's own model shows a year to year decline in productivity growth. In fact, in 1997, the FCC model indicates that the industry's total factor productivity growth was only 2.5% -- *some 4 percent less than the existing offset.*

Moreover, none of the multi-year averages relied upon by the Commission support an X factor at current levels. Indeed, the *average* model results for the period when price cap regulation was in effect (taking into account the input price differential) produce an historical X factor of no more than 4.4%. More recent multi-year averages are even lower – 4.17% for 1992-97 and 4.38% for 1993-97.

In addition, when it set the 6.5% X factor, the Commission tacked on an additional .5% to the results of its own model as a so called consumer productivity dividend. There is no basis to perpetuate this arbitrary add-on. Originally imposed to capture the productivity gains associated with the transition from rate of return to price cap regulation, the extra half a point now serves only to force reductions in excess of the Commission's own best projection of achievable productivity gains. *See* Crandall Declaration, ¶ 11. Whatever the past justification for such an add-on, the downward trend in productivity results eliminates any theoretical economic arguments to support its continuation.

In fact, with the downward trend in productivity growth, the going forward X factor should be lower than historical levels of productivity growth, given that its purpose is to project *future* productivity. Even while establishing the 6.5% offset, the Commission recognized the existence of economic forces that inhibit continued productivity growth at historical levels.

For example, the restructure of access rates from per-minute to per-line rates decreases productivity growth,[3] and any greater shift of cost recovery onto flat rate charges would lessen potential productivity gains still more.[4] Contrary to the claim in the *Access Reform Order*, the import of this restructure is not offset by efficiency gains as a result of increased demand from lower prices. Because long distance carriers have failed to pass through past reductions in per-minute charges, there can be no presumption that they would do so going forward, which in turn negates any presumption of a demand increase.[5]

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[3] Dr. Christensen has estimated that the impact of those changes is approximately four tenths of a point. *1997 Price Cap Order* at ¶ 128.

[4] As a result of the rate structure adopted in access reform, the full impact of the annual price cap reductions have been placed on the per-minute rate. Because those reductions are based on total interstate revenues (including the end-user per-line charges, which were not reduced) the net impact on long distance carriers per-minute rate has been the equivalent of an X factor of almost 9%. *See* worksheet attached as Exhibit 2.

[5] *See* NERA study attached to letter from Roy Neel to Chairman William E. Kennard (filed Oct. 21, 1998). Even if long distance carriers did pass through future reductions, access charges are only one component of long distance costs and the demand stimulation impacts would be limited. *See* Affidavit of William E. Taylor, attached to USTA comments filed today.

Even more important is the downward pressure on productivity growth generated by the growth in competition. While competition has stalled the incumbent local carriers' growth in usage revenues, there is no equivalent reduction in costs, which are primarily associated with embedded network equipment that must be maintained regardless of usage. *See* Crandall Declaration, ¶ 9. Moreover, as competitors enter the market, they have targeted services that are both the most profitable and the most productive. As this competition continues to intensify over the coming year(s), productivity growth can be expected to remain below historical levels, and the Commission's forward-looking offset should be reduced accordingly.

Regardless of its causes, however, there can be no question of the empirical fact that the Commission's own productivity model shows that the current X factor overstates expected productivity gains.

Long distance carriers nevertheless seek to force access charges down even faster by arguing that that the Commission should ignore economic principles and pretend to calculate an interstate-only productivity factor using some arbitrary division of local carrier facilities by jurisdiction. But the Commission correctly rejected such efforts in the price cap review, concluding that there was no way to "quantify the extent, if any, to which interstate productivity growth may differ significantly from total company productivity growth." *1997 Price Cap Order*, ¶ 110.

In fact, the entire notion of an interstate-only productivity growth is a fiction. As Dr. Melvyn Fuss explained, there is no "economically meaningful way" to separate total costs into the costs of producing interstate services and the costs of producing intrastate service. Declaration of Melvyn Fuss, attached as Exhibit 2 to the Joint Reply Comments of Bell Atlantic and NYNEX, ¶ 6 (filed Feb. 14, 1997) ("Fuss Declaration"); *see also* Crandall Declaration, ¶ 13. As a result, there is no way to calculate a separate productivity growth rate for interstate services.

In its reconsideration petition, AT&T tries to escape this fact by making the unsupported "assumption" that "inputs grow at the same rates for ... interstate access services as they do for ... other regulated (local and intrastate) services." Petition of AT&T Corp. for Partial Reconsideration at 9 (filed July 11, 1997) ("AT&T Petition"). But AT&T cannot simply assume away the problem. And while AT&T claims that "no specific allocation of costs is required" given its assumption,[6] the assumption itself is "a particularly simplistic form of cost allocation which cannot be taken seriously as an economically meaningful allocation."[7]

Dr. Christensen explained the fallacy in AT&T's argument by using the analogy of a factory that produces red and blue paper clips. Except for the coloring, the two products use the exact same production process. By applying AT&T's assumption to his example, Dr. Christensen demonstrated that the assumption "led to the economically meaningless conclusion" that the "productivity growth of one color paper clip was different from the productivity growth of the other color." Christensen Associates,

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6 AT&T Petition at 9.

7 Fuss Declaration at ¶ 8. AT&T also cites *Rural Tel. Coalition v. FCC*, 838 F.2d 1307, 1314 (D.C. Cir. 1988) to support a secondary argument that even if its allocation is not "perfect," it is at least a "reasonable method." AT&T Petition at 11. But AT&T's arguments fail even such a modest standard. The Court in *Rural Tel. Coalition* reaffirmed that when a regulator is *required* to separate costs among jurisdictions even when "there is no purely economic method of allocation," it may rely on "noneconomic values." This has no applicability here, where no allocation is required, and even AT&T agrees that the X factor calculation must have an economic basis.

"Critique of the AT&T Performance Based Model" at 4, Attachment 6 to USTA Comments (filed Jan. 29, 1997).

Indeed, AT&T's own data suggest that, if it were possible to separate interstate inputs in a meaningful way, which it is not, more highly capitalized inputs would produce a *lower* level of productivity growth. *See* Professor Frank M. Gollop, "An Economic Analysis of the AT&T and Ad Hoc Comments" at 21, filed in *Price Cap Performance Review*, CC Dkt 94-1, as an attachment to Reply Comments of BellSouth (filed Mar. 1, 1996). Again, the only change in the X factor supported by record evidence is a downward adjustment.

III. The Commission Must Put In Place A Structure For Pricing Flexibility

For years the Commission has recognized the need to set competitive benchmarks allowing increased flexibility and the elimination of price regulation. The Commission has long understood that additional flexibility is necessary to "allow efficient competition to occur," and that the retention of price caps becomes "counterproductive" as market forces become operational. *Price Cap Performance Review*, 11 FCC Rcd 858, ¶¶ 106, 21 (1995). In the *Access Reform Order*, the Commission identified pricing flexibility as an integral part of its market-based approach to rate regulation. As the Commission recognized, "[e]conomic logic holds that giving incumbent [local exchange carriers] increased pricing flexibility will permit them to respond to competitive entry, which will allow prices to move in a way that they would not have moved were the pricing restrictions maintained. This can lead to better operating markets and produce more efficient outcomes." *Access Reform Order*, ¶ 270 (footnote omitted). In other words, if the goal is market-based pricing, the Commission must give local exchange carriers the ability to adjust prices to meet market competition. See Crandall Declaration, ¶¶ 17-33. The current rules with their limited zones and all or none price adjustments simply fail that requirement.

If consumers are to receive the benefits of head to head access competition, the Commission must honor its own commitment to create "specific competitive triggers and corresponding flexibility." *Id.* Bell Atlantic's proposal, which allows three levels of pricing flexibility (up to and including removal of price regulation) based on the degree of competition for a service or group of services is a measured framework that meets the Commission's needs, protects customers, and allows the market to function. USTA, in its filing today, proposes a substantially similar plan, which Bell Atlantic supports. At a minimum, the Commission should act to remove from price regulation those services already facing significant competition. The time and the record has long been ripe for Commission action, and given the recent explosion of new competition, the Commission can no longer afford to merely study the problem and endorse the need for future action. It must act now.

Conclusion

The only actions consistent with the record in the access reform and price cap dockets are a reduction in the X factor and the adoption of rules for pricing flexibility and the removal of competitive services from price regulation.

Respectfully submitted,

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October 26, 1998

EXHIBIT 1

Federal Communications Commission
Washington, DC 20554

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for Local Exchange Carriers	)	RM-9210

Declaration of Robert W. Crandall

1. I have been asked by Bell Atlantic to provide an analysis of the issues raised by the Commission's October 5 Public Notice in CC Dockets No. 96-262, 94-1, and 97-250 involving possible adjustment of the price caps for local-exchange carriers, proposals for prescriptive, cost-based carrier access charges, and local-exchange carrier pricing flexibility in response to competition. These issues have arisen in the post-1996 environment of a transition from highly-regulated rates to one in which carrier rates are driven by market-based competition.

Qualifications

2. I am a Senior Fellow in Economic Studies at the Brookings Institution in Washington, DC, a position that I have held since 1978.[1] Prior to that I was Acting Director, Deputy Director, and Assistant Director of the Council on Wage and Price Stability in the Executive Office of the

[1]The views expressed herein are solely my own and should not be taken to represent the views of the Brookings Institution, its other staff members, or its Trustees.

President, and in 1974-75 I was an adviser to Commissioner Glen Robinson of the Federal Communications Commission. I was an Assistant Professor and Associate Professor of Economics at MIT between 1966 and 1974. I have written widely on telecommunications policy, the economics of broadcasting, and the economics of cable television. I am author or co-author of four books on communications policy published by the Brookings Institution since 1989: Changing the Rules: Technological Change, International Competition, and Regulation in Communications (with Kenneth Flamm), 1989; After the Breakup: U.S. Telecommunications in a more Competitive Era, 1991; Talk is Cheap: The Promise of Regulatory Reform in North American Telecommunications (with Leonard Waverman), 1996; and Cable TV: Regulation or Competition? (with Harold Furchtgott-Roth), 1996. A copy of my curriculum vitae is attached.

Introduction and Summary Conclusions

3. It is very important to recall that the issues in this proceeding arise in an era of transition from cost-based regulation to market competition that began long before the passage of the 1996 Telecommunications Act. Eight years ago, the Commission adopted price caps as a replacement for rate-of-return regulation for the large incumbent local exchange carriers (ILECs). This change was driven by the Commission's concern that cost-based regulation provided very poor incentives for carrier efficiency and that price caps would more closely replicate the incentives of unregulated markets. These price caps have been extremely successful by almost any measure, creating an environment in which the (ILECs) have reduced their prices, introduced new services, and improved their efficiency.

4. The Commission's increase in the X factor to 6.5 percent in May 1997 occurred in an environment of robust economic growth and at the beginning of the market-opening processes ushered in by the 1996 Telecommunications Act. As a result, the Commission was able to base its revised price-cap formula on its interpretation of the results for a period in which telecommunications demand was increasing very rapidly and in which competition was still in a relatively early stage of development. Now, more than two years after the passage of the 1996 Act, the Commission can observe the effect of increasing competition on ILEC productivity. Incorporating the results from the last two years into its analysis, the Commission will be forced to conclude that the X factor should be adjusted downward.

5. Obviously, the economic growth that has driven the demand for access lines and usage since 1991 cannot continue unabated. Competition is surely growing and -- as I shall demonstrate -- at an increasing rate. Given the large share of fixed costs in ILEC total costs, this competition will place downward pressure on ILEC productivity growth. It is important, therefore, that the Commission develop a mechanism for adjusting the productivity offset -- or X factor -- as competition expands.

6. In 1997, the Commission adjusted the structure of carrier-access charges, substituting new or increased fixed per-line charges for per-minute charges. However, the Commission wisely decided to allow the remaining per-minute charges to be driven by market forces, not prescriptive, cost-based regulation. This decision was very much in keeping with the desired efficiency effects of price caps. It should not now reverse course and substitute cost-based,

prescriptive regulation for this market-based approach. To do so, would place the Commission in the position of vitiating price caps in favor of cost-based regulation.

7. As local competition increases, the ILECs should be freed to adjust their rates in response to market conditions. This will require the Commission to develop a policy that specifies the degree of pricing flexibility to be allowed the ILECs as competition evolves further. Such a policy would be consistent with the Commission's avowed desire to rely on market forces wherever possible.

Price Caps and the Productivity Offset (X-Factor)

8. In its May 1997 price-cap review, the Commission increased the X factor in the ILEC rate cap to 6.5 percent from 5.3 percent. This increase reflected the Commission's assessment of the productivity gains prior to the implementation of the 1996 Telecommunications Act and the decline in input costs to the ILECs. More recent data, however, demonstrate that this assessment was overstated. The Commission now has more than two years' experience with increasing competition under the 1996 Act and the opportunity to analyze the effects of such competition on ILEC productivity. This analysis will require a decrease in the X factor because the ILECs' total-factor productivity has been growing more slowly in the last two years, in part because of a deceleration in ILEC output growth and a reduction in the rate of decline in their use of labor.[2]

[2] See the USTA Comments submitted in this proceeding.

This slowing of ILEC growth is undoubtedly an early reflection of the effects of increased competition due to the 1996 Act.

9. The ILECs have already been subject to aggressive competition in many service markets from the Competitive Access Providers (CAPs). In addition, new CLECs are beginning to attract subscribers at an increasing rate. All told, the CLECs are now gaining subscriber lines at a rate of about 2.5 million per year, and this rate has been accelerating over the past year. (See Table) Given the large share of fixed and sunk costs in the ILECs' cost structures, they will find it increasingly difficult to recover the full costs of facilities installed in a regulatory regime that

Table

Access Line Growth for CLECs, 1997-98
(New Access Line Equivalents)

Access Lines	2d Qtr, 97	3rd Qtr, 97	4th Qtr, 97	1st Qtr, 98	2d Qtr, 98
Business	246,000	400,000	497,000	551,000	612,000
Residential	2,000	15,000	19,000	21,000	25,000
Total	248,000	415,000	516,000	572,000	637,000
CLEC Share of All New Lines	10.2%	12.5%	16.6%	16.3%	23.9%

Source: Merrill Lynch, Telecom Services -- Local, September 10, 1998.
Note: Access Line "Equivalents" are weighted total lines with the weights being proportional to the revenue potential of the line. For example, an analog voice line is assigned a weight of 1.0, but a DS-1 line is assigned a weight of 8.8.

has required them to be prepared to serve all customers. Obviously, in this competitive transition, the ILECs' productivity growth could slow considerably.[3]

10. If the Commission is to recalibrate the X factor once again, it should therefore consider the likely effects of competition on the ILECs' future productivity performance and develop an ex ante approach for adjusting the X factor in response to competitive events that it now knows will affect ILEC productivity growth. As competitors provide increasing amounts of switched access service, for example, the ILECs are likely to experience a much lower rates of subscriber-line growth unless all of the entry is through the lease of UNEs. At the same time, the ILECs will assuredly lose the high-volume subscribers to new competitors at first. The loss of these highest-volume customers will cause the ILECs to suffer reductions in the growth of network usage and, therefore, reductions in overall productivity growth. Finally, the ILECs are likely to lose more customers in their lower-cost areas and retain most of their customers in the high-cost areas because of the rate averaging now required by regulators. All of these phenomena will surely depress ILEC productivity growth.

11. In addition to the recalibration of the X factor, an obvious candidate for this ex-ante adjustment is the productivity "dividend" that is now built into the calculation of the X factor.

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[3] See Laurits R. Christensen, Philip E. Schoech, and Mark E. Meitzen, "Updated Results for the Simplified TFPRP Model and Response to Productivity Questions in FCC's Access Reform Proceeding," filed with USTA Comments, CC Docket No. 96-262, January 27, 1997. Citing earlier work, Christensen, Schoech, and Meitzen, estimate that each percentage point reduction in the annual growth rate for an ILEC will reduce its TFP growth by 0.3 to 0.5 percentage points.

Whatever rationale existed for the consumer productivity dividend (CPD), after eight years of price-cap experience there is simply no justification for continuing to add to measured productivity experience in calculating the X factor. Moreover, simply eliminating this productivity dividend as competition increases would be far preferable to adjusting the X factor to ex post reductions in ILEC growth of lines, minutes, or revenues, i.e., to actual historic results. The latter policy would create adverse incentive for ILECs in the post-1996 competitive era, forcing them to trade off the potential reductions in the X factor from not competing aggressively against the benefits in terms of greater revenues and overall profits from competitive services. Surely, the Commission does not wish to reduce the incentives for the ILECs to compete.

12. The Commission should look closely at the California Public Utilities Commission's December 1995 decision to reduce the X factor to the prevailing inflation rate for GTE and Pacific Bell in the wake of its decision to open California's telecommunications markets.[4] The California PUC expressly rejected pleas that it wait for the results of competition before reducing the productivity offset for the state's major ILECs, citing the need to assure that incumbents be able to finance capital expenditures in the face of open competition. Similarly, the British regulator, Oftel, recently reduced the productivity offset in British Telecom's retail price cap to 4.5 percent based in part on its analysis of the likely future rate of growth of BT's retail services.[5]

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[4] Public Utilities Commission of the State of California, Decision 95-12-052, December 20, 1995.

[5]OFTEL, The Pricing of Telecommunications Services from 1997: OFTEL's Proposals for Price Control and Fair Trading, Chapter 6, May 1997.

Indeed, Oftel stated that " A key consideration in arriving at the value of X is the fact that the best protection for customers and the best spur to higher efficiency will be competition." It even signaled that its new regulations may well be the last price regulations needed in a market characterized by open entry. Clearly, Oftel has moved into the vanguard of enlightened regulators, anticipating the need for clear, forward-looking approaches to regulation and deregulation in the new, competitive environment for telecommunications that include the need to reduce the X factor in BT's retail price cap in anticipation of intensifying competition.

13. Finally, the Commission should resist AT&T's entreaty that it calculate a separate X factor for interstate services. Any attempt to allocate inputs to interstate or intrastate jurisdictions for this purpose would be arbitrary. Many of the same facilities originate and terminate both intrastate and interstate calls. This joint-product problem would make any exercise of determining separate interstate and intrastate productivity growth arbitrary.

Market-Based versus Prescriptive, Cost-Based Access Charges.

14. In 1997, the Commission took the laudable step of restructuring access charges while leaving the future level of per-minute access charges to the operation of both price-cap regulation and market forces. At that time, it resisted entreaties to set per-minute access charges directly on the basis of a cost model. While per-minute access charges may continue to be above cost in some jurisdictions, the Commission cannot know with precision the incremental cost of carrier access in various markets at different times of the day, nor the share of fixed, common costs that

should be ascribed to access services. Even in a competitive market, the price of such services would not equal the incremental cost of access service if there are large common, fixed costs of network operation.[6]

15. It would be preferable, therefore, to allow market forces, including competition among the ILECs CAPs and CLECs, to determine the level of per-minute access charges. These market signals are likely to be much more accurate than any cost model submitted to or developed by the Commission. Even if competition does not immediately affect all rates, the Commission's price-cap mechanism attempts to replicate the overall effect of market forces by reducing rates in response to expected improvements in productivity.

16. Any attempt to prescribe carrier access charges reflects a movement towards cost-based regulation and compromises the efficiency-enhancing properties of price caps. The entire rationale of price caps is to eliminate regulatory determinations of the relative costs of various services and to allow regulated carriers the freedom to reduce costs and to adjust rates towards costs. As the Table above shows, competition is accelerating in local markets. Most of this competition is occurring for business services, including the provision of carrier access services to interexchange carriers. It would be unfortunate indeed if the Commission abandoned its

[6]Given the variability of demand over hours of the day, days of the week, and even across seasons, a competitive market would not lead to prices that reflect the long-run incremental cost of service at all times. Moreover, the average price would be above engineering estimates of long-run incremental cost unless these estimates included the share of fixed, common network costs that would be allocated to access service in a competitive market.

market-based approach prematurely and returned to cost-based regulation at a time when competition is growing rapidly. Indeed, the Commission could easily reduce the incentive for competitive entry if its cost model produced prescriptive rates that are at levels below those that would otherwise exist in a competitive market.

Pricing Flexibility

17. The substitution of competition for regulation in local access/exchange markets provides the opportunity for markets to replace regulators in determining how telecommunications services should be designed, marketed, and priced. However, this substitution may be seriously delayed unless the Commission establishes precise guidelines for reducing and even eliminating price regulation of ILEC services very soon. As competitive entry proceeds, it is important for the Commission to allow both the new competitive local exchange carriers (CLECs) and the ILECs to respond to these market forces without waiting for the arbitration of lengthy regulatory disputes. The rules for this deregulation must be known in advance so that entrants and incumbents alike can proceed without fear of regulatory delays and expensive regulatory proceedings.

18. If the Commission does not allow the ILECs to adjust their rates in markets that are subjected to competition from the CLECs, it will maintain a pricing "umbrella" for the CLECs that will, in turn, deny consumers the benefit of further rate reductions from competition. The Commission should not view itself as a protector of competitors, but rather as a guarantor of

competition. We know from the experience of decades of protective regulation of airlines, trucks, and railroads that such pricing umbrellas significantly reduce consumer welfare.

19. The Commission should act now to develop guidelines for such ILEC pricing flexibility under the price-cap regime. It should also provide a criterion for determining when sufficient competition exists to remove these services from price cap regulation altogether. By providing clear guidelines, the Commission can avoid becoming enmeshed in scores or even hundreds of disputes and piecemeal, case by case determinations involving individual ILEC responses to competitive entry.

20. In designing a more flexible pricing regime for the incumbent carriers, the Commission should be guided by several economic principles. First, competition simply does not work as well to allocate resources if one of the major rivals in a market cannot respond to the others' output and pricing decisions. If incumbents are not permitted to vary their rates, as well as the terms and conditions of service, in response to entry, rates will not gravitate as quickly to competitive, market-based levels or, indeed, may never get there. Second, prices should be permitted to direct customers to the most efficient supplier of the services they want and to guide investment decisions for both ILECs and CLECs. If the incumbent LECs are not permitted to compete on the basis of price, customers may choose inefficient suppliers, and, in turn, further inefficient investment will occur. As a result, consumers would be denied the most efficient price-quality combination of services. Finally, as long as the incumbents are not under traditional cost-based regulation, the Commission need not fear that price flexibility can be used predatorily

by an ILEC. With price caps and incremental-cost floors, price flexibility is not a threat to competition Rather, such price flexibility is the essence of competition.

21. Given current (regulated) prices, competitors are currently concentrating on business customers. (See the Table above.) For example, when making its original bid for MCI in October, the vice chairman of Worldcom asserted that Worldcom would not be interested in MCI's residential subscribers.[7] A lengthy New York Times article focused on the attractiveness of business customers to telecommunications and other high-technology firms. It also pointed out that "[a]s British Telecom, GTE, and Worldcom vied to acquire MCI Communications, for example, they were eyeing the two-thirds of MCI's revenue that comes from high-margin business customers."[8] More recently, AT&T signaled its intention to focus on business customers in its local-market strategy by merging with TCG, one of the largest CAPs marketing predominantly to business customers.

22. In addition, the Commission's rules require that rates for many services be uniform throughout an ILEC's entire service area despite large differences in cost caused by differences in population density, topography, or zoning and other land-use restrictions. As a result, entrants will not launch their attack on the ILECs in the high-cost areas, but will concentrate instead on

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[7] Mike Mills, "Worldcom Would Shift MCI's Focus," Washington Post, October 3, 1997, pp. A1 ff. Subsequently, Worldcom announced that it would reconsider this policy.

[8] Seth Schiesel, "The No. 1 Customer: Sorry It Isn't you," New York Times, November 23, 1997, pp. 3-1 ff.

the lower-cost areas where regulated rates are above cost due to rate averaging.

23. Under the 1996 Act, new entry may occur with very little capital investment, CLECs can attack an ILEC's high-margin business customers by assembling unbundled network elements (UNEs) at cost-based wholesale rates. Indeed, a CLEC could assemble an entire service from UNEs, thereby limiting its investment to a very low level.[9] In many states, the rates for UNEs are deaveraged to reflect the cost characteristics of different areas. Thus, a CLEC could purchase UNEs in only the densely-populated areas at rates that reflect the lower cost of service in these areas and offer service to business customers in these areas whose current regulated retail rates are above cost.

24. Similar opportunities exist in the ILECs' markets for special-access and transport services. With rates for these services averaged over wide areas, CAPs and other CLECs have already captured substantial portions of the market in densely-populated urban areas. If the ILECs are not permitted to offer contract rates or otherwise deaverage their special-access and transport rates, CLECs will continue to increase their market, secure in their knowledge that they will not face price competition from the ILECs. The CLECs will simply use the ILECs' averaged rates as a pricing umbrella with the full knowledge that the ILECs cannot offer targeted price reductions except in some artificial regulatory-created zones. The result will be the appearance of

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[9] Iowa Utilities Board v. FCC, Nos. 96-3321, et.al., U.S. Court of Appeals for the Eighth Circuit, July 18, 1997. This decision relieves the ILECs from the responsibility for assembling the UNEs for entrants, but entrants may still construct an entire service from UNEs themselves.

competition without consumers receiving the full benefit of lower, market-determined prices.

25. Competition in any market provides important benefits by driving prices toward incremental costs (subject to the need also to recover joint and common costs) and inducing a search for the more efficient delivery of services by all suppliers. In most markets, all firms are free to respond to competitive entry by adjusting their prices because they do not require regulatory approval to match or beat the entrants' prices. In local telecommunications markets, however, ILECs' rates for interstate services are closely regulated and subject to a requirement that they be averaged over an entire study area, a requirement that severely limits this flexibility unless the Commission modifies its rules. If an ILEC wants to reduce its rates throughout a study area,[10] it will be forced to reduce some rates that are already near or below cost in order to meet competition for its customers whose rates are above costs. This asymmetrical regulatory policy obviously reduces the incentive for the ILEC to reduce its above-cost rates, thereby limiting the degree of price competition in the market and depriving consumers of the benefits of competition.

26. For those customers whose regulated rates are currently below costs -- particularly in areas of low population density -- CLECs are likely to rely initially on resale of ILEC local services. Given that these ILEC services are available to CLECs at the current retail rates less avoidable costs, CLECs will be able to offer service to the entire market through either resale or

[10] For an RBOC, a study area is generally an entire State.

the use of UNEs. Neither alternative requires the CLEC to invest very much in network facilities since it may rely in whole or in part on the incumbents' network facilities. Over time, however, entrants are likely to find that substituting UNEs or their own facilities for resale, which results in de facto access competition, will allow them greater flexibility in designing service packages for their customers and controlling their own networks.

27. This ability to compete without large investment in fixed costs makes the ILECs' markets -- particularly those for switched access -- contestable much sooner than would be the case if CLECs were forced to build all of their own facilities. Indeed, this was the purpose of including unbundling requirements in the 1996 Act. Once a CLEC has executed an interconnection agreement with the ILEC and the CLEC begins to purchase unbundled elements, the CLEC is able to win any subscriber in the ILECs market.[11] Therefore, the ILEC is immediately threatened with the loss of its most profitable customers and should be able to respond by beginning to adjust its switched access rates to meet the competition as soon as competitors begin to lease UNEs under a state-wide interconnection agreement. The only remaining potential impediment to such competition, once UNEs are being leased by CLECs, is the marketing costs of attracting business and residential customers.

28. In some states, regulators have allowed the ILECs to respond to CLEC entry by

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[11]Of course, the entrant is likely to find that using unbundled elements that are priced at cost is an unattractive strategy in rural areas where residential rates are kept below cost by regulators. In these areas, the entrant is more likely to rely on resale.

offering contract rates to large customers for a variety of intrastate services. If the benefits from competition are to be realized in interstate markets, ILECs must be permitted to reduce their above-cost rates for interstate services in which competitive entry occurs. Otherwise, their customers will often be denied the choice of the most efficient service packages and may end up purchasing services from higher-cost suppliers. Without pricing flexibility, the ILECs would find themselves unable to compete to retain profitable services even though they may be the most efficient suppliers of such services. Over time, this loss of high-margin business without the ability to respond through lower rates would require a recalibration of their price caps to permit the ILECs to recover their investment from services with low regulated rates.

29. The ILECs' special access and transport services are offered to other carriers who are generally sophisticated, large buyers. In many urban markets, these services are already subject to competition from CAPs. Once these CAPs or new facilities-based CLECs have begun to collocate their facilities with those of the ILECs and have obtained cross connections to these facilities, the ILECs should be free to respond by entering into contracts with flexible rates.

30. It would be extremely burdensome to require each ILEC to enter into a separate regulatory proceeding to demonstrate the existence of competition in each of its switched-access or special-access/transport markets. Therefore, the Commission should establish precise ex ante criteria, based on sound economic principles, for determining when and where ILECs will be afforded pricing flexibility.

31. Bell Atlantic and USTA both have proposals centered about a three-phase process for introducing pricing flexibility. The precise details for drawing the boundaries between each of these proposed phases inevitably involves the exercise of the Commission's judgment. However, adopting such a set of rules would bring a modicum of predictability to the regulation of ILECs as competitors begin to enter their markets. By establishing precise guidelines in advance, the Commission avoids having to arbitrate disputes over the degree of potential or actual competition in each and every geographic and service market served by the ILECs and obviates the need to deal with a growing number of individual petitions. The history of transportation regulation, natural-gas regulation, and FCC regulation of private lines in the 1960s and 1970s provide a strong warning of the dangers inherent in relying upon a myriad of fact-finding processes to carry out regulatory policy in markets in which there are multiple sellers.

32. The Commission should begin immediately to draft rules for allowing the ILECs pricing flexibility in their markets for switched services and special-access/transport services. These rules should provide for predictable increases in the degree of flexibility as entrants reach various milestones. Once interconnection agreements are negotiated making UNEs available to competitors throughout a given geographic area, ILECs should be permitted some flexibility. Once competitors are actually present in a substantial share of the wire centers, say, 25 percent, this flexibility should be increased. Finally, once competition has spread to most of the areas, the services should be removed from price-cap regulation.

33. The Commission should avoid both the regulatory gaming and the disincentive effects

of tying price flexibility and, ultimately, deregulation to the ILECs' loss of market share. This approach with respect to AT&T's interstate services led to asymmetric regulation that lasted far too long and created excessive costs of continuing regulatory struggles between AT&T and its rivals. The Commission should learn from this experience and enact rules that allow ILECs pricing flexibility under predictable conditions based upon sound economic principles.

I hereby declare, under penalty of perjury, that the foregoing is true and correct to the best of my knowledge and belief.

10/26/98

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Bell Atlantic Price Cap Revenues

	Description		***Base Period Demand x Current rates***	***Source***
1	SLC Revenues	$	2,003,762,840	**
2	Revenues Excluding SLC and IX	$	3,946,213,311	**
3	Total Price Cap Revenues exc. IX	$	5,949,976,151	**
4	GDP-PI minus Productivity Factor (X)		-4.35714%	*(2.14286% - 6.5%)*
5	Reduction Applied to Revenues Excluding SLC	$	(259,248,791)	*Line 4 * Line 3*
6	Percentage Reduction to Carrier Rates		-6.56956%	*Line 5 / Line 2*
7	**Implied X Factor**		**8.71%**	*2.14286% - (Line 6)*

Source:

** *Calculated using the July 23, 1998 Price Cap Tariff Review Plan, SUM - 1.*

CERTIFICATE OF SERVICE

I hereby certify that on this 26th day of October, 1998, a copy of Bell Atlantic's foregoing "Comments on Notice to Refresh the Record" was sent by first class mail, postage prepaid, to the parties on the attached list.

Jennifer L. Hoh

* Via hand delivery.

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